

Introduction to the UK Multi-Agency Interoperability Programme

"Unifying communications to increase public safety"

Michael Hallowes

Detective Chief Superintendent NPIA Head of Strategic Operations Director, UK Multi-Agency Interoperability Programme

Topics



Communications Interoperability

- Why we need to improve
- When it's needed
- Requirements
- Common Operating Picture
- UK Interoperability Continuum
- Partnership opportunities.





NPIA: Making a unique contribution to public safety





Specialist Training: Search, Firearms & Investigation



Interoperable Fixed & Mobile Communications



Identity Assurance Information & Intelligence Systems & Biometric Databases



Recruitment Selection & Promotion Exams & Assessment Leadership Training



National Police College & International Academy Bramshill





Enterprise Architecture Police National Network



Neighbourhood Policing Programme



Automatic Number Plate Recognition & National ANPR Data Centre



Specialist Operational Support



www.npia.police.uk

MAIP Team









"The capability of organisations or discrete parts of the same organisation to exchange operational information and use it to inform decision making."







Increased public and personnel safety through improved multi-agency communication and co-ordination.

Predicated on assessing accurately threat, risk and harm, and working together in a safe and effective response.



Why ?



Organisational learning - all hazards approach





Organisational learning



Without planned interoperability...

- Improvised business processes
- Slower deployment of capabilities
- Lack of clarity for operational staff
- Disconnect between command levels
- Decisions made in isolation
- Inaccurate briefings to personnel
- Incomplete messages to public.

Strategic impact on public / responder confidence



Organisational learning



Common understanding of the situation and each other's capabilities to respond



Courtesy of Guardian Newspapers

2007 UK Floods



When ?



It adds value by:

- Increasing safety
- Alerting people to immediate hazards
- Supporting decision-making either at an individual level or as a collective group
- Contributing to a common understanding and awareness of the situation, and
- Improving at incident co-ordination.



Requirements ?



- Common standards
- Common radio platform / network
- Compatible data exchange technologies
- Common language and symbols
- Direct Electronic Incident Transfer
- Common Operating Picture
- Scalable: local to regional to national
- Scalable: emergency to disaster
- Affordable !
- = communications interoperability utopia.



Context



Economic constraints

- Necessary
- Sufficient
- Affordable

"Transformational Government" Re-use and optimise existing investments in technologies

Cultural

 National solution but not national services. 49 Fire Bigger

49 Fire Brigades 15 Ambulance Services 55 Police Services



Scope

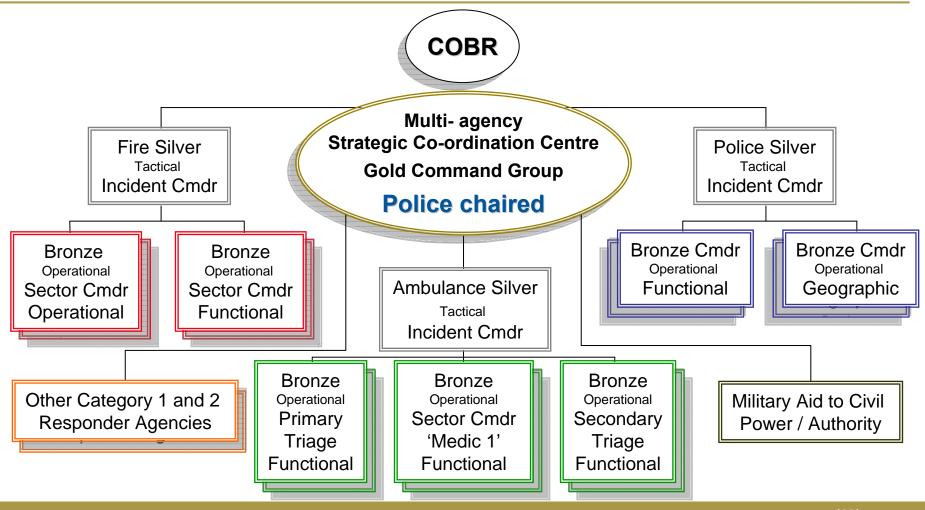


- Category 1 and 2 Responder Agencies
- Armed Forces (MACA / MACP)
- Commanders and Managers
- People, Processes and Systems that optimise use of enabling Technologies.



UK command structure





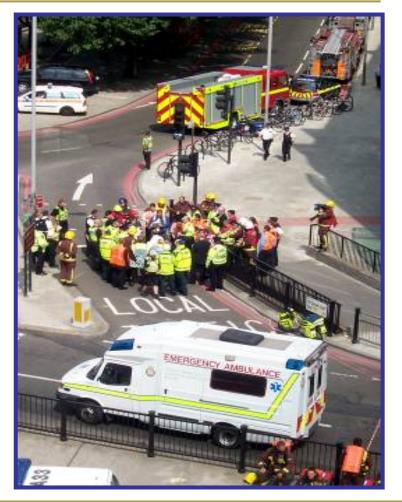


Harnessing technology



"...Better technology can expand our capabilities and free our agents to spend their time where it is most valuable..." Secretary Janet Napolitano,

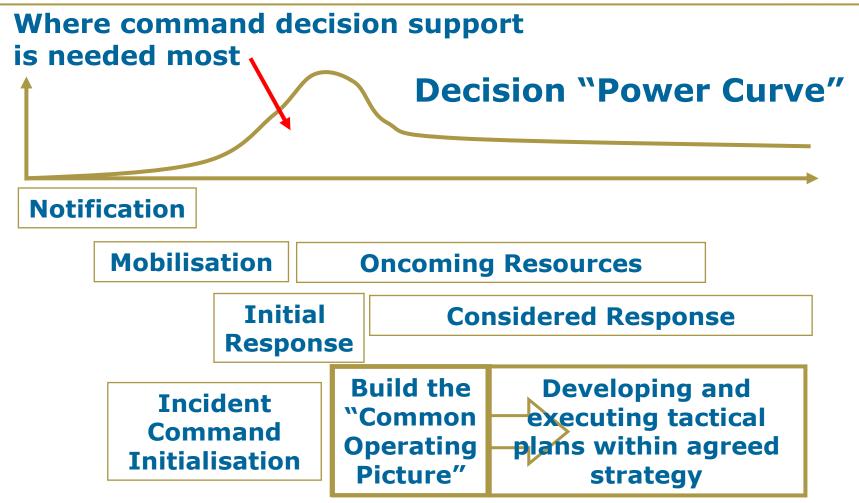
US Department of Homeland Security





Typical incident lifecycle







Common Operating Picture



Filtered, operationally relevant information

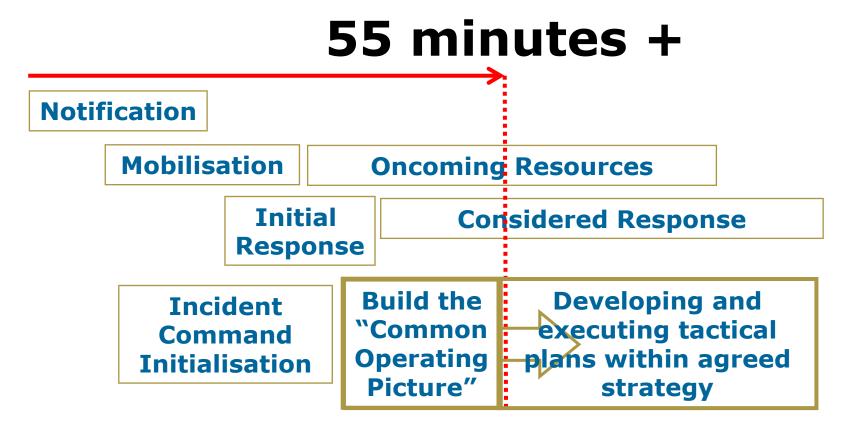
"Display of relevant operational information collected from and shared by more than one agency or organisation that contributes to a common understanding of a situation and its associated hazards and risks along with the position of resources and other overlays of information that support individual and collective decisionmaking."





Typical incident lifecycle: Current capabilities

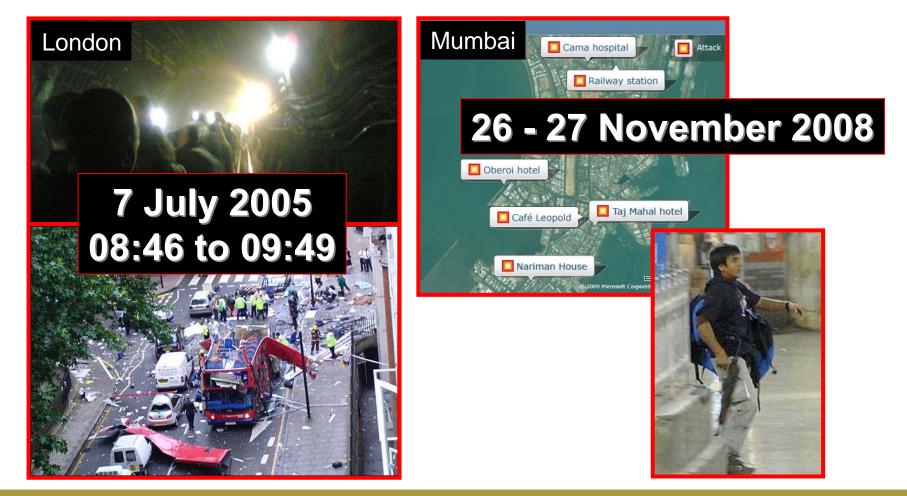






Information vacuum

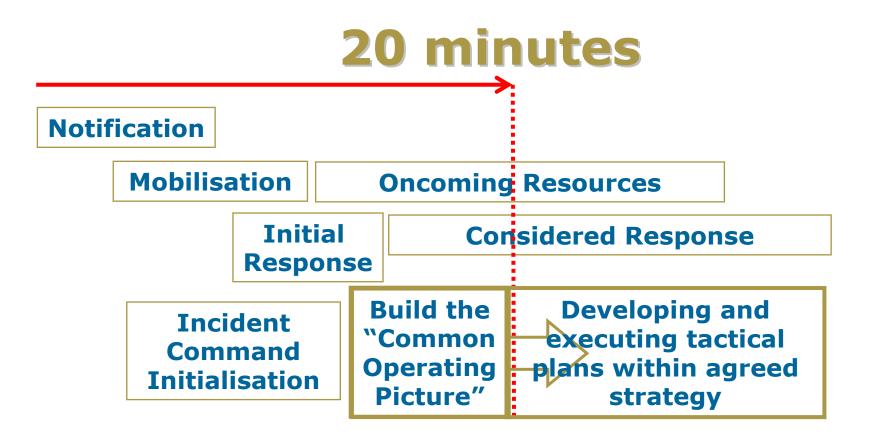






Typical incident lifecycle: Desired capability

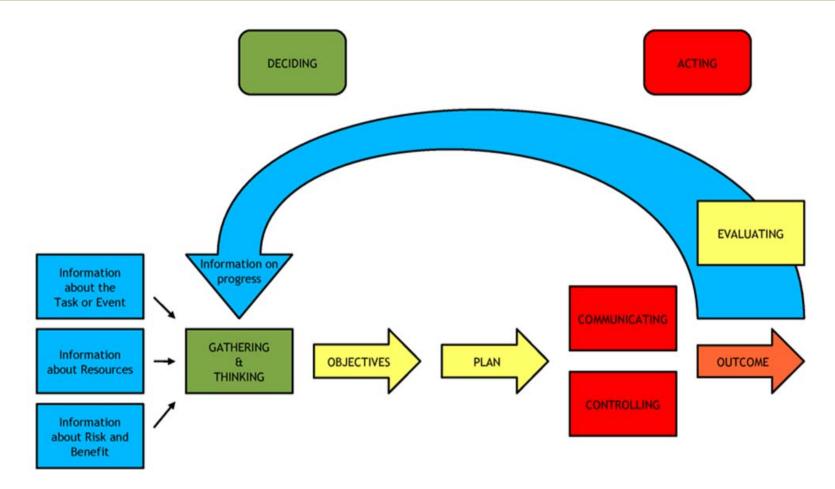




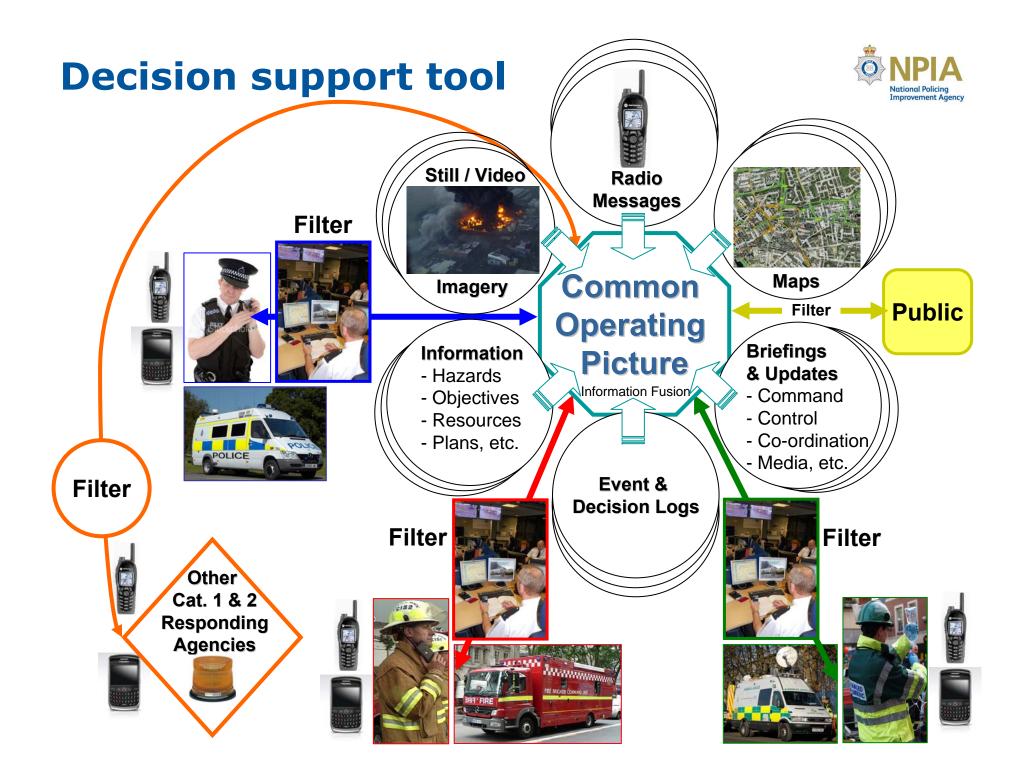


Decision-making model









Voice & Data interoperability: Common Operating Picture

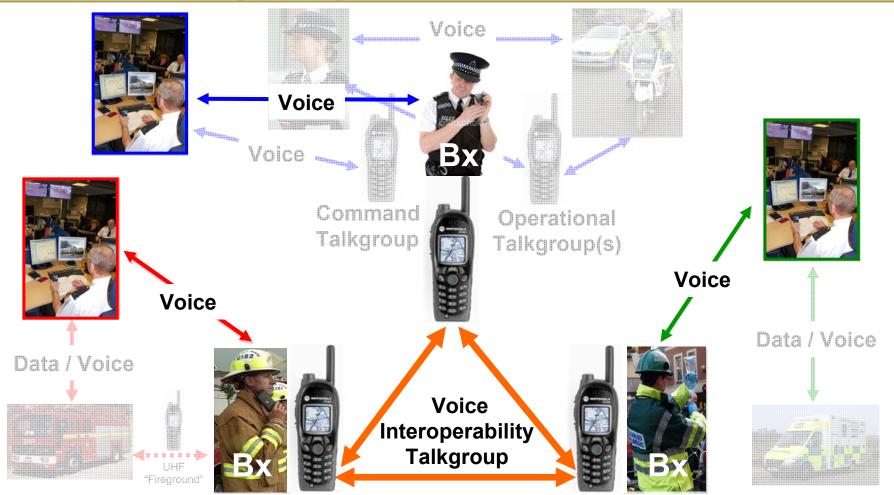






Airwave interoperability between Agency commanders



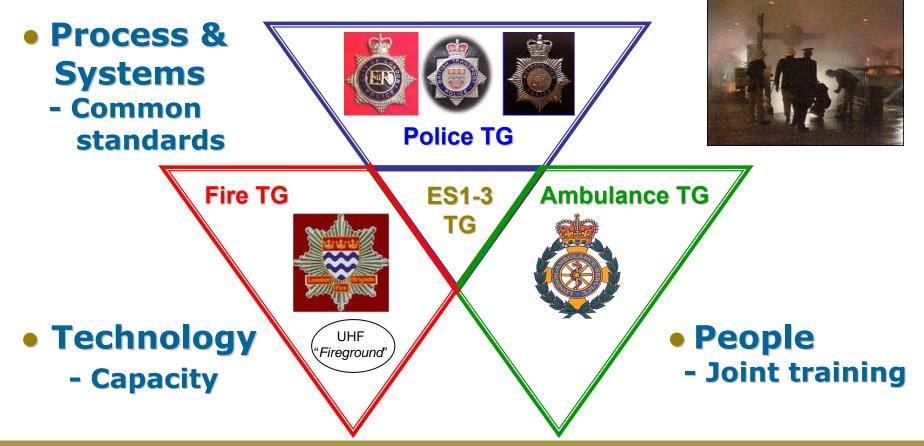




Airwave in London Underground



Radio Interoperability





Programme deliverables

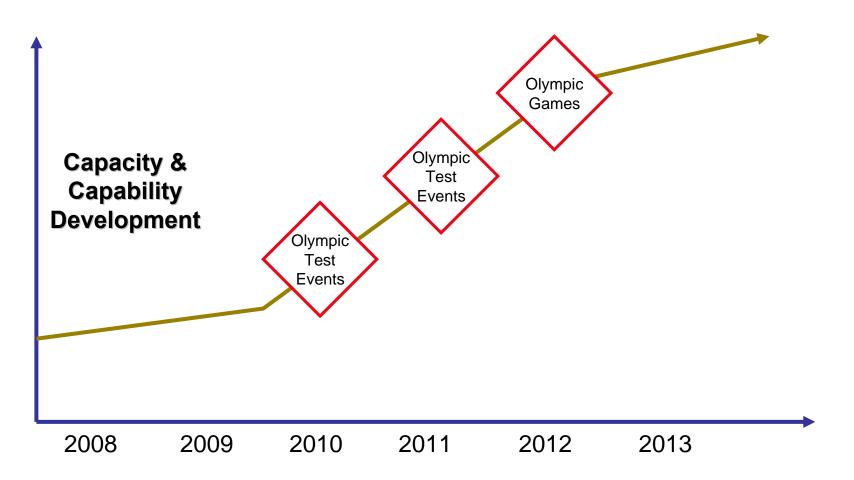


Tri-Service User Requirement and MoU **V** Guidance on Multi-Agency Interoperability **V** SOP Guide on Multi-Agency Airwave Interoperability **2010 D.E.I.T. requirements and solutions 2010 Identify Common Operating Picture** requirements and capabilities 2010 SOP Guide on Multi-Agency Data Interoperability 2010 Joint training, exercising and implementation.



Interoperability check-points







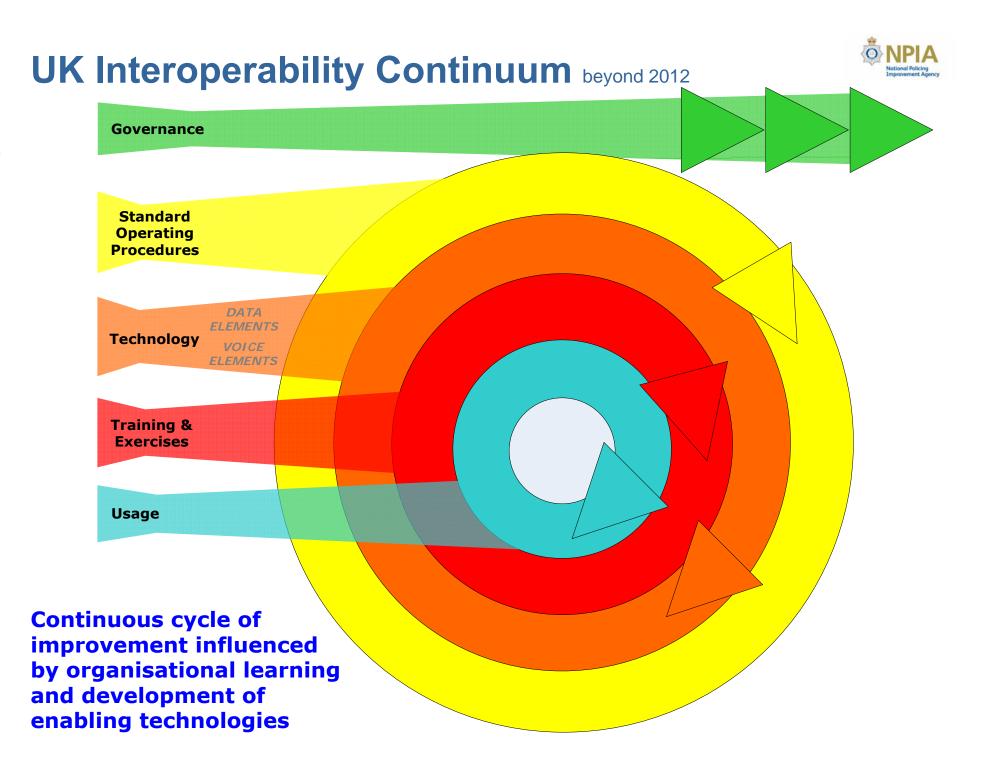
UK Interoperability Continuum



overnance	2 Responder cumentation	Interoperability Programme Board & Multi-Agency Interoperability Programme	Memorandum of Understanding between Chief Officer Associations	NSID (PSR) Ministerial oversight	LRF & RRF Interoperable Communication framework for all Category 1 & 2 Responder Agencies	CCS leads `national interoperability committee'
tandard perating pocedures Doctrine)	nong <mark>Category</mark> 1 & ing s <mark>ystems an</mark> d do	Individual Guidance Responder Multi-Age Agency Interopera SOPs	ency Interoperable	Agency SOPs adapted for Airwave Interoperable Voice Communication	Common Operating Picture SOP to integrate people, process and technologies	Agency SOPs integrated to create the 'UK National Incident Management System'
DATA EMENTS chnology /OICE EMENTS	Limited leadership, planning, and collaboration among Category 1 & 2 Responder Agencies with minimal investment in the integrating systems and documentation	Individual Mobile Information Programmes Individual Airwave Programmes	Compatible applications for `at incident' command, control & coordination Interim Bronze Interoperability Solution (IBIS)	Direct Electronic Incident Transfe between Contro Centres Airwave availabl to Category 1 & Responder Agencies	e Integrate voice	Future Communications Project
ining & ercises	Limited lea <mark>dership, p</mark> lanning, Agencies with minimal invest	TrainingIntercNeedsCommAnalysiscomm	operable Voice nunication for manders and into m	nteroperable ommunication v ulti-agency Co cercises co	ining modules on Interoperable /oice and Data mmunication for ommanders and munications staff	Interoperable Voice and Data Communication built into multi- agency exercises
Usage	Limitec Agenci	Planned events	incidents and mu	itual aid mut ergencies emer	ual aid gencies Res	ly use whenever 2 or more ponder Agencies ed to coordinate heir activities

Minimal Level 🔶

Optimal Level



What does success look like ?



- National implementation by 2011
- Interoperability is business as usual
- Common Operating Picture in use daily
- Common command culture
- Harmonised people, processes and systems, and technology
- Increased public and personnel safety.





Working in partnership



Collaborating to accelerate the pace of change Who's got the lid with the picture to the jigsaw puzzle box ?









interoperability@npia.pnn.police.uk +44 207 021 7028 www.npia.police.uk/en/13512.htm

